If you program codes to control devices, record your codes here:

(CBL) CBL: _____

(TV) TV:

(DVD) DVD: _____

AUX:

AT8450[™] Rev A AllTouch[®] Remote Control User's Guide





In This Guide

Welcome to the Ultimate Control Experience!	3
How Does a Universal Remote Control Work?	3
Where Do I Start?	3
Important Information About Power Control	3
Quick Reference	4
What Devices Can I Control?	6
What Devices Do I Want to Control?	6
Reassign Mode Keys	6
Program the Remote to Control My Devices	7
What If None of the Codes Work?	8
Which Code Worked?	9
Change Power Control	10
Change Volume Control	12
Change Channel Control	13
Change VCR/VOD Programming	14
Put It Back the Way I Got It	15
Code Tables	16
FCC Compliance	Rack Cover

Welcome to the Ultimate Control Experience!

Your new AT8450[™] AllTouch[®] Universal Remote Control (remote) is a true universal remote, functioning as four remotes in one. As one example, you can use this remote to operate your TV, VCR or DVD player, cable box, and audio receiver.

How Does A Universal Remote Control Work?

You tell the remote which type of device you want to operate using the four keys arched across the top of the remote. These keys, known as **mode keys**, are labeled **CBL**, **TV**, **DVD**, and **AUX**. Each mode key is associated with a specific device. As an example, if you want the remote to operate your TV, you simply press the TV key. Other keys you press on the remote thereafter should operate your TV. Want to switch the remote to operate a different device? Just press the mode key for the next device you want to operate. In this guide, you will learn which types of devices you can control and how to program the remote to control your specific devices.

Note: Some remote keys may not operate in all modes. You can even program your remote to assign specific functions, such as channel control, to operate one device only. You will learn more about these advanced functions later in this guide.

Where Do I Start?

Before you begin programming your remote, complete the following initial setup tasks.

Install the Batteries

The remote requires two AA batteries (alkaline recommended). A diagram in the battery compartment of the remote indicates proper placement of the batteries. When batteries are properly installed, the light on the remote blinks each time a key is pressed.

Visit the Quick Reference

Timing is often important when you program advanced features. Therefore, knowing where certain keys are on the remote gives you an edge in pressing the right key at the right time.

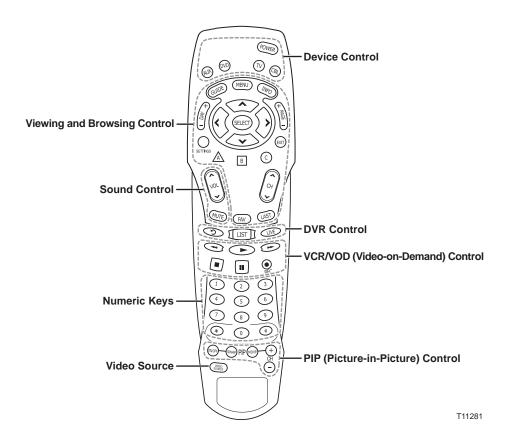
Find a Place to Store Your Remote

Keeping up with one remote is much easier than keeping up with four remotes. However, it is still a good idea to find a storage location for your remote. The AT8450 AllTouch Remote Control is not a toy. It should be kept out of the reach of children under the age of 6 years.

Important Information About Power Control

Scientific-Atlanta strongly recommends that you turn off your cable box every time you turn off your TV. To make this easier, you can program your remote to turn both devices on or off at the same time. After you program the remote to control your favorite entertainment devices, see **Change Power Control** to learn more about programming your remote to control power for the TV and cable box at the same time.

Quick Reference



Device Control

Powers on or off

(AUX) Controls AUX functions

OVD Controls DVD functions

(TV) Controls TV functions

(CBL) Controls Cable functions

Sound Control

Adjusts volume

Mutes sound

Viewing and Browsing Control

GUIDE Displays the program guide

Displays the Applications
Menu

Displays channel and program information

Navigates through the program guide by days

Moves through selections

Selects and deselects screen item

Navigates through settings or the program guide

Displays the General
Settings or Quick settings
menus

Exits settings, menus, and guides

Selects options in menus and the program guide

Selects channel, up or down

FAV Views favorite channels

Returns to last channel viewed

Numeric Keys

Enters channel numbers and remote codes (also enters your parental control PIN)

* Reserved for future use

Reserved for future use

DVR Control

Replays the previous few seconds of a program

Displays a list of programs that you have recorded, so that you can select one for viewing

Displays live television programming

VCR/VOD (Video-On-Demand) Control

Note: In DVD mode, use these keys to control your VCR.

Rewinds VCR/VOD

Plays VCR/VOD

Fast forwards VCR/VOD

Stops VCR/VOD

Pauses VCR/VOD

Records program

PIP (Picture-In-Picture) Control

Opens or closes the PIP window

Swaps the contents of the PIP window and the main viewing screen so that the PIP window displays on the main screen

Moves the PIP window to another location on the screen

Selects the channels in the PIP window, up or down

Video Source

Selects the video source

What Devices Can I Control?

The **mode keys** arched across the top of the remote tell the remote which device you want to operate.

Each mode key is associated with different groups of devices. You can use each mode key to control *one* of its associated devices:

Mode Key	Associated Devices	()	1
CBL	cable boxes, HDTV tuners, and satellite receive	vers T11	1282
TV	. TVs and HDTVs		
DVD	DVD players, VCRs, digital video recorders	(DVRs), and CD player	îS.
AUX	receivers, tuners, and Home Theater in a Box	x (HTIB)	

What Devices Do I Want to Control? Record the devices (including brand) you want to control here:

1	3
2	4

Does each mode key relate to only one of your devices? If yes, go to **Program the Remote to Control My Devices**. Otherwise, reassign the mode keys to match your combination of devices.

Reassign Mode Keys

If you are a big movie fan, you may want to control two video recording devices. Perhaps you have a DVD player and a VCR, or a VCR/DVD combination device. How can you control both the VCR and the DVD player when you only have one DVD key? With the AT8450, you can reassign a mode key to operate in a different mode. For example, you can reassign the AUX key to operate the VCR in DVD mode. Then, you can program the DVD key to control your DVD player. You can reassign the AUX key, the DVD key, or both. The TV key and the CBL key cannot be reassigned.

Reassigning Mode Keys (Program Code 9 9 2)

- 1. Press and hold **SELECT** and **CBL** until all mode keys blink twice.
- 2. Press 992. The CBL mode key blinks twice.
- 3. Press the mode key associated with the type of device you want to control, and then press the mode key that you want to change. All mode keys blink three times.

Some Common Examples

- To program the AUX key to operate in DVD mode, press **DVD** and then **AUX**.
- To program the DVD key to operate in TV mode, press TV and then DVD.
- 4. When finished, go to **Program the Remote to Control My Devices**.

Program the Remote to Control My Devices

Try to use your remote to control your devices. If the remote does not work for a device, you can assign a different device code to the appropriate mode key. If the remote provides only limited functionality for a device, you can look for a code that provides more functionality. Before you begin, make sure you know the brand name of the device you want to control.

Note: Some remote keys may be assigned to operate one device type only. For example, volume control may be assigned to the TV only. If this is the case, you can reprogram power, volume, and channel control using procedures later in this guide.

Assigning a Different Device Code to a Mode Key

- 1. Find the codes for your brand of device in the appropriate setup code list at the end of this guide. For example, look under **TV Group** if you need to program the remote to operate your TV.
- 2. Turn on your device.
- 3. Press and hold **SELECT** and the appropriate mode key until all of the mode keys blink twice. For example, to set up the TV, press and hold **SELECT** and **TV**. **Note:** If you reassigned mode keys, you may, for example, press **SELECT** and **DVD** to program the DVD mode key with a TV code.
- 4. Enter the first setup code for the device. All mode keys blink twice to indicate that the code entry was accepted.
- 5. Point the remote at the device, and press **POWER**, , or to test the device.
- 6. Did the device operate correctly?
 - If **yes**, write down the code that worked on the cover of this guide. You may need it again if the device code is accidentally erased.
 - If no, repeat these steps using a different setup code.
 Note: If none of the codes listed for your brand of device operate the device correctly, go to What If None of the Codes Work for instructions.
- 7. Repeat this procedure for each mode key you want to program.

What If None of the Codes Work?

If none of the codes listed for your brand of device operate the device correctly, you can search through the code library for a valid code.

Improving Your Reaction Time

When you search the code library, you need to be ready to press **SELECT** as soon as the remote turns off your device. Therefore, make sure you are familiar with the location of the SELECT key before you begin this procedure.

Sizing Up The Libraries

The mode keys blink twice when the remote reaches the last code in a library. You do not need to count codes. However, knowing the size of each library will help you determine how long it will take to cycle through all of the codes in the library. Each library contains the following number of codes:

• CBL mode: 22 • TV mode: 219

DVD mode: 206
 AUX mode: 37

Searching the Code Library (Program Code 9 9 1)

1. Turn on the device.

 Press and hold SELECT and the appropriate mode key (CBL, TV, DVD, or AUX) until the mode keys blink twice. For example, to search for a TV code, press and hold SELECT and TV at the same time.

Note: If you reassigned mode keys, you may, for example, press **SELECT** and **DVD** to search for a TV code to assign to the DVD mode key.

- 3. Press 9 9 1. The mode key you selected in step 2 blinks twice.
- 4. Point the remote toward the device, and press . The remote automatically tests each code in its library, beginning with the most common codes. The mode key blinks once each time the remote transmits a new code. The mode key blinks twice when it reaches the last code.
- 5. As soon as the device powers off, press **SELECT**.
- 6. Verify the new code is correct by pressing **POWER**.
- 7. Did the device power on again?
 - If yes, press SELECT to assign the code.
 - If **no**, complete the following steps:
 - a) Turn the device on.
 - b) Press \bigcap_{CH} or \bigcup_{CH} to step forward or back to the correct code.
 - c) When the device turns off, press **SELECT** to assign the code.
- 8. Go to **Which Code Worked** to identify the code that controls your device. After you identify the code, record the code in the space provided on the cover of this guide.

Which Code Worked?

Find out which code programmed the mode key to control your device.

Finding the Code That Worked (Program Code 9 9 0)

- Press and hold SELECT and the appropriate mode key (CBL, TV, DVD, or AUX) until all mode keys blink twice.
- 2. Press 9 9 0. The mode key you selected in step 1 blinks twice.
- 3. Press 1; then, count the number of times the mode key blinks. The number of blinks indicates the first digit in the code. For example, 4 blinks indicates the first digit in the code is 4. If the mode key does not blink, the digit is 0.
- 4. Press 2; then, count the number of times the mode key blinks. This number indicates the second number in the code.
- 5. Press 3; then, count the number of times the mode key blinks. This number indicates the third number in the code.
- 6. Press 4; then, count the number of times the mode key blinks. This number indicates the fourth number in the code.
 - Note: After all four numbers in the code are identified, all mode keys blink three times.
- 7. Record the code in the space provided on the cover of this guide. You may need it again if the device code is accidentally erased.

Change Power Control

Your remote was originally programmed in one of the following ways:

- The remote controls power for only one device at a time. For example, in CBL mode
 the POWER key controls the cable box only. However, in TV mode, the POWER key
 controls the TV only.
- The remote controls power for either one device or for multiple devices at once, based on the selected mode. For example, in CBL mode, the POWER key controls both the cable box and the TV at the same time.

Before you change how power control works, try your remote to see how the power control currently works. When trying out your remote, keep in mind that the remote provides a temporary override for power control. For example, if you press the TV key and then the POWER key within 3 seconds, the remote turns on the TV only, regardless of the programmed power settings. To see how the remote is originally programmed, wait at least 5 seconds before pressing the POWER key after you press any mode key.

Does your remote already control power for your cable box and TV at the same time? If not, Scientific-Atlanta strongly recommends that you program the remote to turn off the cable box each time you turn off your TV. Turning off the cable box is especially important for high-end cable boxes that contain hard drives for recording and storing TV programs and movies. Not only will you reduce wear and tear from the hard disk spinning constantly, but you'll also conserve electricity. As long as the cable box remains plugged in, the cable box will receive programming updates, and, if applicable, record programs and movies.

Controlling Power for Multiple Devices at Once (Program Code 9 9 8)

- 1. Press and hold **SELECT** and **CBL** until all mode keys blink twice.
- 2. Press 9 9 8. The CBL key blinks twice.
- 3. Press the mode key for the first device in the group of devices you want to power on and off at once. The CBL key blinks twice.
- 4. Press the mode key for the second device in your power group. The CBL key blinks twice.
- If you want the remote to control power for multiple devices at once, press the mode keys for the next devices you want to add to the power group. The CBL key blinks twice after each mode key is pressed.
- 6. Press **SELECT** to save your power settings. All mode keys blink three times.

Want An Example?

If you want to control power for the TV and the cable box at the same time, you would do the following.

- 1. Press and hold **SELECT** and **CBL** until all mode keys blink twice.
- 2. Press 998. The CBL key blinks twice.
- 3. Press TV. The CBL key blinks twice.
- 4. Press **CBL**. The CBL key blinks twice.
- 5. Press **SELECT**. All mode keys blink three times.

In this example, the remote will function in the following ways:

- When you are in TV mode or CBL mode, the POWER key controls both the cable box and the TV.
- When you are in DVD mode, the POWER key controls the DVD device only.
- When you are in AUX mode, the POWER key controls the auxiliary device only.

Controlling Power for One Device at a Time (Program Code 9 9 8)

- 1. Press and hold **SELECT** and **CBL** until all mode keys blink twice.
- 2. Press 9 9 8. The CBL key blinks twice.
- 3. Press **SELECT** to save your power settings. All mode keys blink three times.

After you select a mode, the POWER key controls the device assigned to that mode. For example, in TV mode, the remote controls power for the TV only.

Important Power Tips

- Scientific-Atlanta *strongly* recommends that you program the remote to turn off the cable box each time you turn off your TV.
- When you "turn off" the cable box using the remote control, you are actually putting
 the box in a power saving mode. As long as the cable box remains plugged in, it will
 continue to receive programming updates and, if applicable, record programs and
 movies.
- If your POWER key controls multiple devices at once, the remote returns to the CBL mode after the devices are powered on or off.
- If your POWER key controls multiple devices at once, you can override this setting
 by pressing the desired mode key and then pressing POWER within 3 seconds. For
 example, if you press the DVD key and then the POWER key within 3 seconds, the
 remote turns just the DVD on or off, regardless of the programmed power settings.

Change Volume Control

Your remote was originally programmed in one of the following ways:

- The remote controls volume for one device, such as your TV, whether the remote is in TV, DVD, or CBL mode. The AUX mode always retains separate volume control.
- The remote controls volume for different devices, depending on the mode key you press. For example, in CBL mode, the volume keys control the cable box. However, in TV mode, the volume keys control the TV.

Try your remote to see how the volume control currently works. The volume keys include $\widehat{\mathbb{Q}}$, $\widehat{\mathbb{Q}}$, and **MUTE**. If you want to change the volume control, complete the procedure that fits your needs.

Controlling Volume for One Device (Program Code 9 9 3)

Note: If you want to assign volume control to a Scientific-Atlanta cable box, complete the following prerequisite steps. Press **SETTINGS** to access the General Settings on-screen menu. Then, verify that the Audio: Volume Control setting is set to **Variable**.

- 1. Press and hold **SELECT** and **CBL** until all mode keys blink twice.
- 2. Press 9 9 3. The CBL key blinks twice.
- Press the mode key for the device the volume keys should control. For example, if you want to control volume through your TV, press TV. All mode keys blink three times.

Notes:

- The volume keys control only one device whether you are in CBL, TV, or DVD mode.
- In AUX mode, the remote always controls volume for the device assigned to the AUX key.

Controlling Volume for Different Devices (Program Code 9 9 3)

- 1. Press and hold **SELECT** and **CBL** until all mode keys blink twice.
- 2. Press 9 9 3. The CBL key blinks twice.
- 3. Press **SELECT**. All mode keys blink three times.

Result: After you select a mode, the volume keys control the device assigned to that mode. For example, in TV mode, the volume keys control volume for the TV only.

Change Channel Control

Your remote was originally programmed in one of the following ways:

- The remote controls channels for a single device, such as the cable box, whether the remote is in CBL, DVD, or TV mode. The AUX mode always retains separate channel control.
- The remote controls channels for different devices, depending on the mode key you press.

Try your remote to see how the channel control currently works. The channel keys include [], U, **Digits 0-9**, **LAST**, and **FAV**. If you want to change the channel control, complete the procedure that fits your needs.

Tip: Consider programming the remote to control channels for just the cable box to ensure you do not accidentally tune off the proper channel for the TV (usually channel 3 or 4).

Controlling Channels For One Device (Program Code 9 9 7)

- 1. Press and hold **SELECT** and **CBL** until all mode keys blink twice.
- 2. Press **9 9 7**. The CBL key blinks twice.
- Press the mode key associated with the device you want the channel keys to control. For example, if you want to assign channel control to your TV only, press TV. All mode keys blink three times.

Notes:

- The channel keys now always control the device associated with the mode you selected in this step, whether in TV, CBL, or DVD mode.
- In AUX mode, the remote always controls channels for the device assigned to the AUX key.

Controlling Channels For Different Devices (Program Code 9 9 7)

- 1. Press and hold **SELECT** and **CBL** until all mode keys blink twice.
- 2. Press **9 9 7**. The CBL key blinks twice.
- 3. Press **SELECT**. All mode keys blink three times.

Result: The channel keys now control the device associated with the mode key you select. For example, in TV mode, the channel keys control the TV, but in CBL mode, the channel keys control the cable box.

Change VCR/VOD Programming

Your remote was originally programmed in one of the following ways:

- The Rewind, Play, Fast Forward, Stop, Pause, and Record keys are known as transport keys. These keys are programmed, by default, to transmit the codes for the Explorer[®] 8000[™] series Home Entertainment Server video-on-demand (VOD) or digital video recorder (DVR) functions when in CBL mode.
- The transport keys control different devices, depending on the mode key you press.

You can choose to override the default settings for the transport keys so that the transport keys operate a different device when you have selected Cable (CBL) mode.

Try your remote to see how the transport keys currently work. If you want to change the settings for the transport keys, complete the procedure that fits your needs.

Changing VCR/VOD Programming (Program Code 9 9 9)

- 1. Press and hold **CBL** and **SELECT** until all mode keys blink twice.
- 2. Press 999. The CBL key blinks twice.
- 3. Press the DVD mode key associated with the device you want the transport keys to now control. All mode keys blink three times.

Results:

- The transport keys now always control the device associated with the mode you selected in this step (DVD).
- Pressing Play starts the VCR, the DVD, or the device that has been reassigned to AUX.
- In AUX mode, the remote always controls channels for the device assigned to the AUX key.

Restoring Default VCR/VOD Settings (Program Code 9 9 9)

- 1. Press and hold CBL and SELECT until all mode keys blink twice.
- 2. Press 999. The CBL key blinks twice.
- 3. Press **CBL**. All mode keys blink three times.

Result: The transport keys are restored to their default settings.

Example: Pressing Play in CBL mode starts the DVR.

Put It Back the Way I Got It

Return specific advanced functions or all advanced functions back to their original settings. Choose the procedure that fits your needs.

Important: Your cable service provider may have programmed the dual power control feature for your convenience. Therefore, if you reset the power control, you may need to program the remote to control the power for the cable box and TV at the same time.

Resetting Mode Keys (Program Code 9 9 2)

You can reprogram the DVD key and the AUX key to operate in their original modes.

- 1. Press and hold CBL and SELECT until all mode keys blink twice.
- 2. Press 9 9 2. The CBL key blinks twice.
- 3. Do one of the following:
 - If you are returning the DVD key to its original state, press **DVD** twice.
 - If you are returning the AUX key to its original state, press **AUX** twice. All mode keys blink three times.
- 4. Repeat this procedure if you want to return both keys to their original modes.

Resetting Device Codes and Mode Keys (Program Code 9 7 7)

Follow this procedure to return programmed device codes and mode keys to their original settings. This procedure erases device codes you programmed. In addition, this procedure returns all reassigned mode keys to their original operation.

This reset procedure does not reset any changes you made to power, volume, or channel control.

- 1. Press and hold **SELECT** and **CBL** until all mode keys blink twice.
- Press 9 7 7. All mode keys blink three times. Then, after a few seconds the CBL key blinks twice.

Resetting Power, Volume, and Channel Control (Program Code 9 8 0)

Follow this procedure to return power, volume, and channel control to their original settings. This reset procedure does not reset any device codes you programmed or affect mode key reassignments.

- 1. Press and hold **SELECT** and **CBL** until all mode keys blink twice.
- 2. Press 9 8 0. All mode keys blink three times.

Resetting All Changes (Program Code 9 8 1)

Follow this procedure to return the remote completely back to its original settings.

- 1. Press and hold **SELECT** and **CBL** until all mode keys blink twice.
- 2. Press **9 8 1**. All mode keys blink three times. Then, after a few seconds the CBL key blinks twice.

Code Tables

If the remote does not recognize your device, you can find codes for your device by brand. With combination devices (such as a TV with a built-in DVD player), you have separate codes for each device component. Therefore, for ease of use, the combination device codes are listed first. All other code tables are organized by devices assigned to each mode (CBL, TV, DVD, AUX).

Combination Devices

If you have a combination device, you may need to reassign the AUX key to operate one of the devices. See Reassign Mode Keys for more information. The following tables provide some examples of combination devices. If your combination device is not listed, simply look for the codes for each separate device.

DVD/VCR Combo Codes

Brand	DVD Code	AUX (VCR) Code	Model
Go Video	2141	2038	DVR5000
Go Video	2147	2044	DVR4200
JVC	2142	2039	HRXVC1U
RCA	2143	2040	VC125HF
Samsung	2144	2041	DVD-V2000
Sanyo	2145	2042	DVW5000
Zenith	2146	2043	XBV243

TV/DVD Combo Codes

Brand	TV Code	DVD Code	Model
Broksonic	1181	2148	SC975
RCA	1182	2149	BD20TF10
Sansui	1185	2196	
Toshiba	1183	2150	MD20FL3

Tuner/CD Combo Codes

3034 Bose

CBL Group: Cable, HDTV Tuner, and Satellite Devices HDTV Tuner Codes

Cable Codes

Scientific-Atlanta	0000, 0001, 0002, 0003, 0004, 0005
ABC	0010
GE	0010
Gemini	0011
General Instruments	0010
Hitachi	0010
Jerrold	0010, 0011
Motorola	0007
Pioneer	0009
Proscan	0010
Signature	0010
Starcom	0011
Stargate	0011

Panasonic	0021
Philips	0022
RCA	0017
Satellite Codes	

Dish Network	0016
Dishnet	0013
Echostar	0014
GE	0012
Hughes	0015
Philips	0023
Proscan	0012
RCA	0012
Sony	0019, 0020
Zenith	0024

TV Group: TVs and HDTVs

TV Codes	
Admiral	1001, 1139, 1159
Aiko	1014
Akai	1002
Amtron	1034
Anam National	1003, 1034
AOC	1004, 1005, 1006,
	1007, 1140, 1141, 1153
Apex	1180, 1184, 1186
Audiovox	1034
Bell & Howell	1001, 1042, 1062
Broksonic	1181
Carver	1000
Celebrity	1002
Citizen	1004, 1006, 1008,
	1014, 1034, 1062, 1087, 1137, 1160
Colortyme	1004, 1006, 1009
Contec/Cony	1010, 1011, 1012,
	1034
Craig	1034
Crosley	1000
Crown	1034
Curtis Mathes	1000, 1004, 1006,
	1013, 1042, 1053, 1062, 1087, 1137,
	1160, 1167
Daewoo	1004, 1005, 1006,
	1014, 1015, 1016,
D .	1103, 1137, 1151
Daytron Dimensia	1004, 1006, 1137 1053
Dumont Electroband	1004, 1122 1002
Electrohome	1002, 1003, 1004,
Liceronome	1002, 1003, 1004,
Emerson	1004, 1006, 1010,
	1019, 1020, 1021,
	1022, 1023, 1024, 1025, 1026, 1027,
	1023, 1020, 1027, 1028, 1029, 1030,
	1031, 1032, 1033,
	1034, 1035, 1036,
	1037, 1038, 1039, 1040, 1042, 1062,
	1101, 1137, 1142,
	1143, 1152, 1168
Envision	1004, 1006
Fisher	1041, 1042, 1043, 1062, 1144
Fujitsu	1040
Funai	1034, 1040
Gateway	1237
GE	1003, 1004, 1006,
	1018, 1044, 1045, 1046, 1053, 1072,
	1132, 1133, 1134,
	1145, 1161
Goldstar	1004, 1005, 1006,
	1010, 1017, 1047, 1048, 1049, 1126,
	1127, 1137, 1138
Hallmark	1004, 1006

mar o i	
TV Codes Hitachi	1004, 1006, 1010,
maciii	1011, 1012, 1050.
	1051, 1052, 1109,
	1110, 1111, 1112,
	1113, 1114, 1115, 1116, 1117, 1118,
	1119, 1120, 1121,
	1143, 1154, 1166,
	1169
Infinity	1000
JBL	1000
JC Penney	1004, 1005, 1006, 1008, 1011, 1018,
	1008, 1011, 1018, 1044, 1045, 1048,
	1049, 1053, 1061,
	1072, 1086, 1087,
	1104, 1137, 1138, 1145
Jensen	1004, 1006
JVC	1010, 1011, 1012,
310	1045, 1051, 1054,
	1055, 1056, 1128,
	1129, 1146, 1168
Kawasho	1002, 1004, 1006
Kenwood	1004, 1006, 1017
Kloss Novabeam	1034, 1057, 1058
KTV	1034, 1059, 1137,
IXI V	1142
LG	1005
Logik	1001
Luxman	1004, 1006
LXI	1000, 1006, 1042,
	1053, 1060, 1061, 1062, 1145
Magnavox	1002, 1143
g	1008, 1017, 1057,
	1058, 1063, 1064,
	1065, 1073, 1106, 1107, 1108
Majestic	1001
Marantz	1000, 1004, 1006,
	1050, 1066
Megatron	1006, 1050
Memorex	1001, 1005, 1006,
MGA	1042, 1062 1004, 1005, 1006,
MOA	1017, 1018, 1043,
	1067, 1068
Mitsubishi	1004, 1005, 1006,
	1017, 1018, 1043, 1067, 1068, 1069,
	1102
Montgomery	1001
Ward	
Motorola	1003, 1139
MTC	1004, 1005, 1006,
Multitech	1087 1034
Multivision	1070
NAD	1006, 1060, 1061,
	1147, 1166
NEC	1003, 1004, 1005,
NT:1-1	1006, 1009
Nikko	1006, 1014
Onwa Optimus	1034 1147, 1166
Opumus	1147, 1100

TV Codes	
Optonica	1079, 1139
Orion	1031, 1152
Panasonic	1003, 1045, 1136, 1162
Philco	1000, 1003, 1004,
	1005, 1006, 1008,
	1010, 1017, 1057,
	1058, 1063, 1065
Philips	1000, 1003, 1004,
	1008, 1010, 1017, 1057, 1058, 1063,
	1071, 1072, 1073,
	1074
Pioneer	1004, 1006, 1075,
	1076, 1143, 1147,
	1166
Portland	1004, 1005, 1006,
	1014, 1137
Price Club	1087
Prism	1045
Proscan	1053, 1145
Proton	1004, 1006, 1010, 1077
Quasar	1003, 1045, 1059,
	1078, 1162
Radio Shack	1042, 1062
Radio Shack/	1004, 1006, 1010,
Realistic	1034, 1042, 1053,
	1062, 1079, 1137,
RCA	1138 1003, 1004, 1005,
KCA	1003, 1004, 1005, 1006, 1007, 1017,
	1053, 1080, 1081,
	1082, 1083, 1084,
	1085, 1105, 1143,
	1145, 1148, 1149,
	1151, 1155, 1163, 1167, 1170, 1182
Realistic	1042, 1062
Runco	1122
Sampo	1004, 1006, 1137,
	1138
Samsung	1004, 1005, 1006, 1010, 1013, 1017,
	1086, 1087, 1088,
	1137, 1138, 1156
Sansui	1152, 1185
Sanyo	1004, 1041, 1042,
,	1062, 1068, 1089,
	1090, 1135, 1144
Scott	1004, 1006, 1010,
	1020, 1031, 1034,
	1040
Sears	1000, 1004, 1006,
	1011, 1012, 1017, 1040, 1041, 1042,
	1040, 1041, 1042, 1043, 1053, 1055,
	1060, 1061, 1062,
	1091, 1092, 1144,
	1145, 1150
Sharp	1004, 1006, 1010,
	1022, 1025, 1079,
	1093, 1094, 1095,
a:	1100, 1137, 1139
Signature	1001
-	
Sony	1002, 1157, 1164, 1165

TV Codes

Soundesign	1004, 1006, 1008, 1034, 1040
Starlite	1034
Sylvania	1000, 1004, 1006, 1008, 1017, 1057, 1058, 1063, 1064, 1065, 1073, 1096, 1131
Symphonic	1029, 1034, 1150
Tandy	1139
Tatung	1003
Technics	1045
Techwood	1004, 1006, 1045
Teknika	1000, 1001, 1004, 1005, 1006, 1008, 1010, 1011, 1012, 1014, 1034, 1040, 1064, 1087, 1136, 1137, 1162
Telecaption	1097
Toshiba	1042, 1060, 1061, 1062, 1087, 1091, 1097, 1098, 1130, 1131, 1183
Totevision	1137
Universal	1044, 1072
Vidikron	1000
Wards	1000, 1001, 1004, 1005, 1006, 1017, 1020, 1029, 1040, 1044, 1053, 1057, 1058, 1063, 1064, 1072, 1073, 1079, 1099
Yamaha	1004, 1005, 1006, 1017
Zenith	1001, 1004, 1122, 1123, 1124, 1125, 1158

HDTV Codes

Daewoo	1223
Hitachi	1193, 1236
JVC	1175, 1194
Mitsubishi	1195, 1206, 1207, 1208, 1209
Panasonic	1179, 1192, 1203, 1211, 1221
Philips	1201, 1212
Pioneer	1216, 1218, 1234
RCA	1198, 1202, 1215
Sampo	1220
Samsung	1178, 1232
Sharp	1197
Sony	1174, 1176, 1177, 1226, 1227, 1229, 1231
Thomson	1171
Toshiba	1172, 1173
Zenith	1225, 1233, 1235

DVD Group: DVR, VCR, CD, and DVD Devices

DVR Codes

2186
2037
2036, 2185, 2187
2188, 2192, 2178
2189
2177
2190
2191

VCR Codes	
Admiral	2035, 2047
Aiko	2018
Aiwa	2017
Akai	2002, 2003, 2004,
A 4:	2031, 2032 2010
Audiovox	
Bell & Howell	2007
Broksonic	2008, 2179
Calix	2010
Canon	2014, 2015
Capehart	2030
Carver	2000
CCE	2018, 2024
Citizen	2009, 2010, 2011,
	2012, 2013, 2018,
<u> </u>	2045
Colortyme	2005
Craig	2009, 2010, 2016, 2024
Curtis Mathes	2005, 2009, 2012,
	2013, 2014, 2015,
	2025, 2046
Daewoo	2011, 2017, 2018, 2030, 2045
Daytron	2030
Dimensia	2025, 2046
Electrohome	2010, 2019
Emerson	2002, 2008, 2010,
	2011, 2014, 2017,
	2019, 2026, 2032
Fisher	2007, 2016, 2020, 2021
P:	
Fuji	, -
Funai	2017
Garrard	2017
GE	2001, 2009, 2014, 2015, 2025, 2046
Go Video	2038, 2044, 2184
Goldstar	2005, 2010, 2013
Gradiente	2017
Harman	2000, 2005
Kardon	
Harwood	2024
Hitachi	2022, 2023, 2029,
	2031
JC Penney	2005, 2006, 2007,
	2008, 2009, 2010,
	2014, 2015, 2022, 2023, 2024, 2029
Jensen	2022, 2023, 2031
30113011	2022, 2023, 2031

VCR Codes	
JVC	2005, 2006, 2007,
	2013, 2031, 2033,
	2039
Kenwood	2005, 2006, 2007, 2012, 2013, 2031,
	2012, 2013, 2031, 2033
KLH	2024
Kodak	2010, 2014
LG	2010
Logik	2024
LXI	2010
Magnavox	2000, 2014, 2015,
	2028
Marantz	2000, 2005, 2006,
	2007, 2012, 2013,
	2014
Matsushita	2014
Memorex	2007, 2009, 2010,
	2014, 2016, 2017,
MCA	2028, 2035, 2047
MGA	2019, 2026, 2032
Minolta	2022, 2023, 2029
Mitsubishi	2019, 2022, 2023, 2026, 2032, 2033
Montgomery	2035, 2047
Ward	2033, 2047
Motorola	2014, 2035, 2047
MTC	2009
Multitech	2009, 2012, 2017,
	2024
NEC	2005, 2006, 2007,
	2012, 2013, 2031,
Nikko	2033 2010
Noblex	2009
Olympus	2014
Optimus	2010, 2035, 2047
Optonica	2010, 2033, 2047
Panasonic	2014, 2015, 2180
Pentax	2012, 2022, 2023,
1 cittax	2029
Pentex	2013
Research	
Philco	2014, 2015
Philips	2000, 2014, 2027,
	2176
Pioneer	2006, 2022, 2033
Portland	2012, 2030, 2045
Proscan	2001, 2025, 2046
Quasar	2014, 2015
Radio Shack/	2010, 2027, 2047 2007, 2009, 2010,
Realistic	2007, 2009, 2010, 2014, 2015, 2016,
realistic	2017, 2019, 2020,
	2021, 2027, 2035
Radix	2010
RCA	2001, 2002, 2009,
	2014, 2022, 2023, 2025, 2029, 2040,
	2025, 2029, 2040, 2046, 2183
Realistic	2007, 2009, 2010,
	2011, 2014, 2015,
	2016, 2017, 2019,
	2020, 2021, 2027, 2035, 2047
Picoh	2035, 2047 2034
Ricoh	2034

VCR Codes

V CIV COUCS	
Runco	2028
Samsung	2004, 2009, 2011,
	2041
Sansui	2006, 2031, 2033
Sanyo	2007, 2009, 2016,
	2042
Scott	2008, 2011, 2026
Sears	2007, 2010, 2014,
	2016, 2020, 2021,
CI	2022, 2023, 2029
Sharp	2019, 2027, 2035, 2045, 2047
Shintom	2003, 2023, 2024
Signature	2035, 2047
	2014, 2024, 2034
Singer	2014, 2024, 2034
Sony	
STS	2014, 2029
Sylvania	2000, 2014, 2015,
<u> </u>	2017, 2026, 2182
Symphonic	2017
Tandy	2007
Tashiko	2010
Tatung	2031
Teac	2017, 2031
Technics	2014
Teknika	2010, 2014, 2017
Toshiba	2011, 2020, 2022,
	2026, 2032
Totevision	2009, 2010
Unitech	2009
Vector	2005, 2006, 2011,
Research	2012
Video	2005, 2006, 2011, 2012, 2032
Concepts Wards	
wards	2000, 2009, 2010, 2011, 2014, 2016,
	2017, 2019, 2022,
	2023, 2024, 2027,
	2029, 2035, 2047
XR-1000	2014, 2017, 2024
Yamaha	2005, 2006, 2007,
	2013, 2031
Zenith	2003, 2028, 2034,
	2043

CD Codes

ADC	2166	
Aiwa	2151	_
Akai	2167	_
Emerson	2152	
Fisher	2153	
GE	2169	
Hitachi	2154	
JVC	2155	
Kenwood	2156	
Marantz	2158	
Mitsubishi	2170	
Nakamichi	2172	
NEC	2157	
Onkyo	2159	
Panasonic	2160	
Pioneer	2161	
RCA	2162	
Sanyo	2175	

CD Codes

Sears	2168	
Sherwood	2173	
Sony	2163	
Teac	2174	Т
Technics	2164	
Toshiba	2171	
Yamaha	2165	

DVD Codes

Aiwa	2057, 2070		
Alpine	2071		
Apex	2068, 2069, 2072,		
	2073, 2199, 2205		
Audiovox	2204		
BOSE	2140		
Broksonic	2074, 2148		
Clarion	2075		
Classic	2076		
Daewoo	2077		
Denon	2078, 2079, 2080,		
Emerson	2081 2082, 2083		
Fisher	2082, 2083		
Funai	2083		
GE			
Go Video	2048, 2085*, 2086 2141, 2147		
GPX	2087		
Hitachi	2056, 2088, 2089,		
Tittaciii	2090, 2091		
JVC	2050, 2058, 2092,		
	2142		
Kenwood	2093		
Konka	2059, 2060		
Koss	2206		
Lasonic	2197		
Magnavox	2051, 2094, 2195		
Memorex	2095		
Mintek	2096		
Mitsubishi	2052		
NAD	2082		
Nakamichi	2097		
Norcent	2098, 2099		
Onkyo	2100		
Oritron	2114		
Panasonic	2061, 2101, 2102,		
	2103, 2104, 2105,		
D1 :11:	2106, 2080, 2200		
Philips	2051, 2067, 2107		
Pioneer	2053, 2108, 2109, 2110, 2111		
Proscan	2048, 2112		
Qwestar	2113 2114		
RCA	2048 2049* 2115		
	2048, 2049*, 2115, 2143, 2149, 2202,		
	2203		
Sampo	2116		
Samsung	2117, 2118, 2119,		
<u>a</u> :	2144		
Sansui	2120, 2196		
Sanyo	2062, 2121, 2145		
*Use when testing this code.			

*Use \to when testing this code.

DVD Codes

Sharp	2122, 2123, 2198
Sherwood	2124
Sony	2054, 2063, 2064, 2125, 2126, 2127, 2128, 2129
Sylvania	2083, 2201
Teac	2130
Technics	2131
Techwood	2132
Toshiba	2055, 2065, 2133, 2134, 2135, 2150, 2207
Yamaha	2136, 2137, 2138
Zenith	2066, 2139, 2146

AUX Group: Receivers, Tuners, Home Theater in a Box (HTIB)

Receiver/Tuner Codes

Aiwa	3000, 3001, 3002, 3003, 3004, 3014,
	3020
Bose	3033, 3034
Carver	3000
Harman Kardon	3000, 3013
JBL	3013
JVC	3005
Kenwood	3006
Linn	3000
Maganvox	3000
Marantz	3000
Onkyo	3015
Panasonic	3016, 3017
Philips	3000
Pioneer	3012*
RCA	3007, 3022, 3023, 3032
Sansui	3000
Sherwood	3019
Sony	3008, 3009, 3018
Technics	3016, 3017
Wards	3000, 3012*
Yamaha	3010, 3011, 3012*

*Use \bigcap_{CH} or \bigcup_{CH} when testing this code.

Home Theater in a Box Codes

Bose	3033	
JBL	3027	
JVC	3028	
Koss	3026	
Onkyo	3029	
Panasonic	3030	
Philips	3025	
Pioneer	3031	
RCA	3024	
Sony	3021	

FCC Compliance

United States FCC Compliance

Note: This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against such interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the cable company or an experienced radio/television technician for help.

Any changes or modifications not expressly approved by Scientific-Atlanta could void the user's authority to operate the equipment.

The information shown in the FCC Declaration of Conformity paragraph below is a requirement of the FCC and is intended to supply you with information regarding the FCC approval of this device. The phone numbers listed are for FCC-related questions only and not intended for questions regarding the connection or operation for this device. Please contact your cable service provider for any questions you may have regarding the operation or installation of this device.

FCC Declaration of Conformity

This device complies with *Part 15 of FCC Rules*. Operation is subject to the following two conditions: 1) the device may not cause harmful interference, and 2) the device must accept any interference received, including interference that may cause undesired operation.

AT8450 AllTouch Remote Control Scientific-Atlanta, Inc. 5030 Sugarloaf Parkway Lawrenceville, Georgia 30044 USA Telephone: 770-236-1077

Canada EMI Regulation

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la class B est conforme à la norme NMB-003 du Canada.



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